

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)

5. (Previously Presented) A method for depositing silicon oxide on a substrate where the deposition is performed by atomic layer deposition and comprises at least one cycle comprising the following sequential steps:

(i) introducing a silicon organic precursor into a deposition zone where a substrate is located, wherein the silicon organic precursor has the formula: $\text{Si}(\text{NR}^1\text{R}^2)_{4-w}\text{L}_w$ or $\text{Si}_2(\text{NR}^1\text{R}^2)_{6-z}\text{L}_z$, and where R^1 and R^2 are, independently, selected from the group consisting of hydrogen, C_1 - C_6 alkyl, C_5 - C_6 cyclic alkyls, halogen, and substituted alkyls and cyclic alkyls, where N is nitrogen, where w equals 1, 2, 3 or 4, where z equals 1, 2, 3, 4, 5 or 6, and where L is selected from the group consisting of hydrogen or halogen;

(ii) purging the deposition zone;

(iii) introducing ozone into the deposition zone; and

(iv) purging the deposition zone,

wherein the deposition is performed at a temperature between 200°C to 400°C.

6. (Previously Presented) The method of Claim 5 wherein the silicon organic precursor is selected from the group consisting of tetramethyldisiloxane (TMDSO), hexamethyldisiloxane (HMDSO), hexamethyldisilazane (HMDSN), and silicon tetrakis(ethylmethanamide) (TEMASi), alkylsilane, alkylaminosilane, alkylaminodisilane, alkylloxysilane, alkylsilanol, alkylloxysilanol.

7. (Cancelled)

8. (Cancelled)

9. (Previously Presented) The method of Claim 5 wherein the deposition zone is maintained at a pressure ranging from 1 mTorr to 760 Torr.

10. (Cancelled)

11. (Previously Presented) The method of Claim 5 wherein the ozone is introduced into the deposition zone provides an ozone concentration in the range 10 to 400 g/m³.

12. (Currently Amended) The method of Claim 5 where the substrate is a ceramics, metals, plastics, glass, ~~and~~ or organic polymers.

13. (Cancelled)

14. (Previously presented) A method for depositing silicon oxynitride on a substrate where the deposition is performed by chemical vapor deposition and comprises at least one cycle comprising the following steps:

(i) introducing a silicon organic precursor into a deposition zone where a substrate is located, wherein the silicon organic precursor has the formula: $\text{Si}(\text{NR}^1\text{R}^2)_{4-w}\text{L}_w$ or $\text{Si}_2(\text{NR}^1\text{R}^2)_{6-z}\text{L}_z$, and where R^1 and R^2 are, independently, selected from the group consisting of hydrogen, C₁-C₆ alkyl, C₅-C₆ cyclic alkyls, halogen, and substituted alkyls and cyclic alkyls, where N is nitrogen, where w equals 1, 2, 3 or 4, where z equals 1, 2, 3, 4, 5 or 6, and where L is selected from the group consisting of hydrogen or halogen;

(ii) introducing ozone into the deposition zone; and

(iii) introducing a nitrogen source into the deposition zone.

15. (Original) The method of claim 14 where the steps are performed simultaneously.

16. (Original) The method of claim 14 where the steps are performed sequentially.

17. (Previously presented) A method for depositing silicon oxynitride on a substrate where the deposition is performed by atomic layer deposition and comprises at least one cycle comprising the following sequential steps:

(i) introducing a silicon organic precursor into a deposition zone where a substrate is located, wherein the silicon organic precursor has the formula: $\text{Si}(\text{NR}^1\text{R}^2)_{4-w}\text{L}_w$ or $\text{Si}_2(\text{NR}^1\text{R}^2)_{6-z}\text{L}_z$, and where R^1 and R^2 are, independently, selected from the group consisting of hydrogen, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_5\text{-C}_6$ cyclic alkyls, halogen, and substituted alkyls and cyclic alkyls, where N is nitrogen, where w equals 1, 2, 3 or 4, where z equals 1, 2, 3, 4, 5 or 6, and where L is selected from the group consisting of hydrogen or halogen;

(ii) purging the deposition zone; and

(iii) introducing ozone and a nitrogen source into the deposition zone without purging between the introducing said ozone and said nitrogen source.

18. (Original) The method of claim 17 where the ozone and nitrogen source are introduced separately in any order.

19. (Original) The method of claim 17 where the ozone and nitrogen source are introduced simultaneously.

20. (Previously Presented) The method of Claim 14 wherein the silicon organic precursor is selected from the group consisting of tetramethyldisiloxane (TMDSO), hexamethyldisiloxane (HMDSO), hexamethyldisilazane (HMDSN), and silicon tetrakis(ethylmethanide) (TEMASi), alkylsilane, alkylaminosilane, alkylaminodisilane, alkylloxysilane, alkylsilanol, alkylloxysilanol.

21. (Cancelled)

22. (Cancelled)

23. (Previously Presented) The method of claim 14 wherein the nitrogen source is selected from the group consisting of atomic nitrogen, nitrogen gas, ammonia, hydrazine, alkyhydrazine, and alkylamine.

24. (Previously Presented) The method of Claim 14 wherein the deposition zone is maintained at a pressure ranging from 1 mTorr to 760 Torr.

25. (Cancelled)

26. (Previously Presented) The method of Claim 14 wherein the ozone introduced into the deposition zone provides an ozone concentration ranging from 10 to 400 g/m³.

27. (Currently Amended) The method of Claim 14 wherein the substrate is a ceramics, metals, plastics, glass, ~~and~~ or organic polymers.